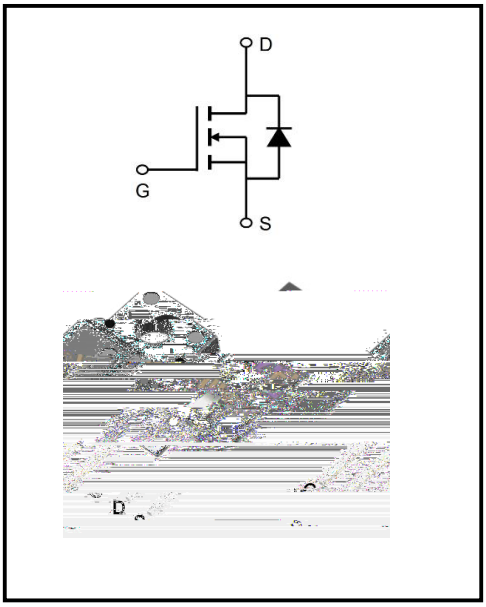
650V N-Channel SiC Silicon Carbide Power MOSFET

MAIN CHARACTERISTICS

I_D	
V_{DS}	
R_{DSON}-typ (@V_{GS}=18V T_C=25°C)	(Typ:154mΩ)



FEATURES

BENEFITS

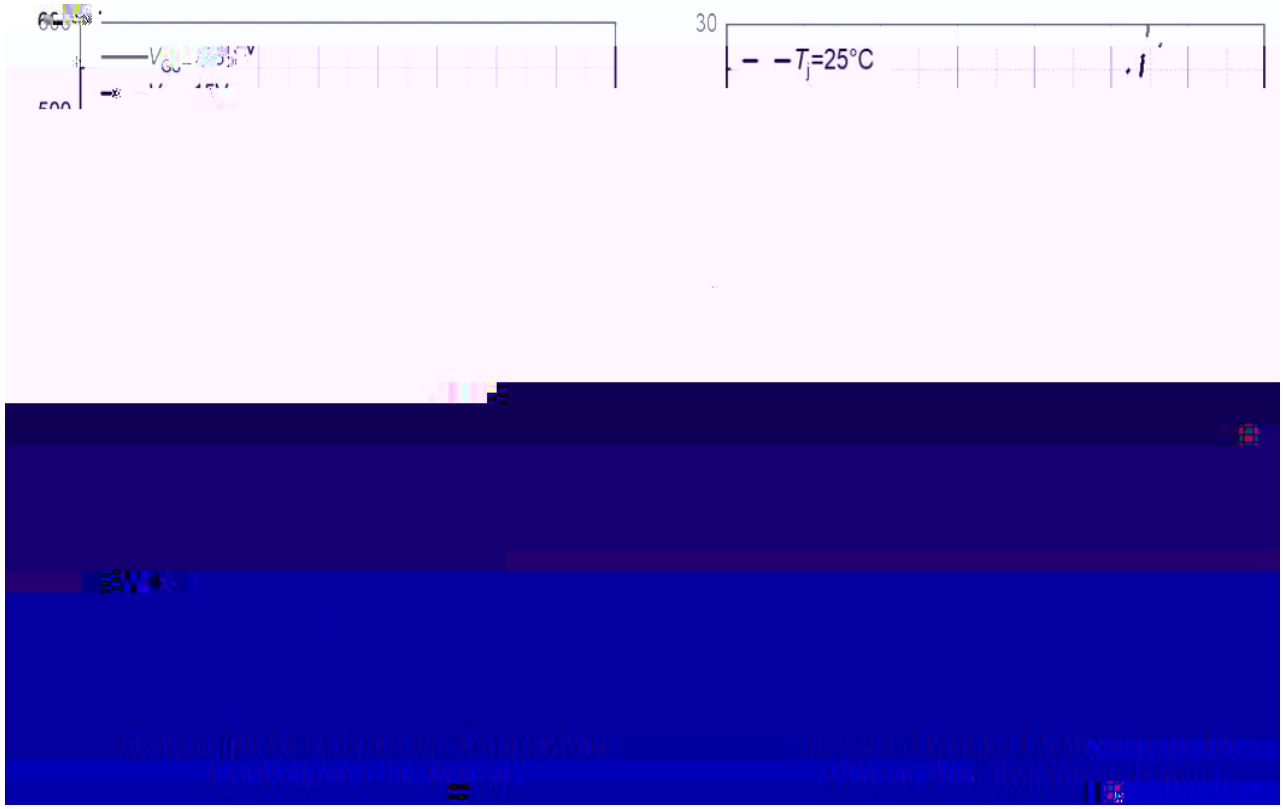
APPLICATIONS

Maximum Ratings at Tc=25 C unless otherwise specified

Parameter	Symbol	Value	Unit
	V_{DS}		V
	V_{GS}		V
	V_{GSop}		V
	I_D		A
			A
	I_{DM}		A
	P_D		W
	T_J		°C
	T_{STG}		°C
	$R_{\theta JC}$		°C/W
	$R_{\theta JA}$		°C/W

Note1:Pulse test: 300 μs pulse width, 2 % duty cycle

RATINGS AND CHARACTERISTIC CURVES



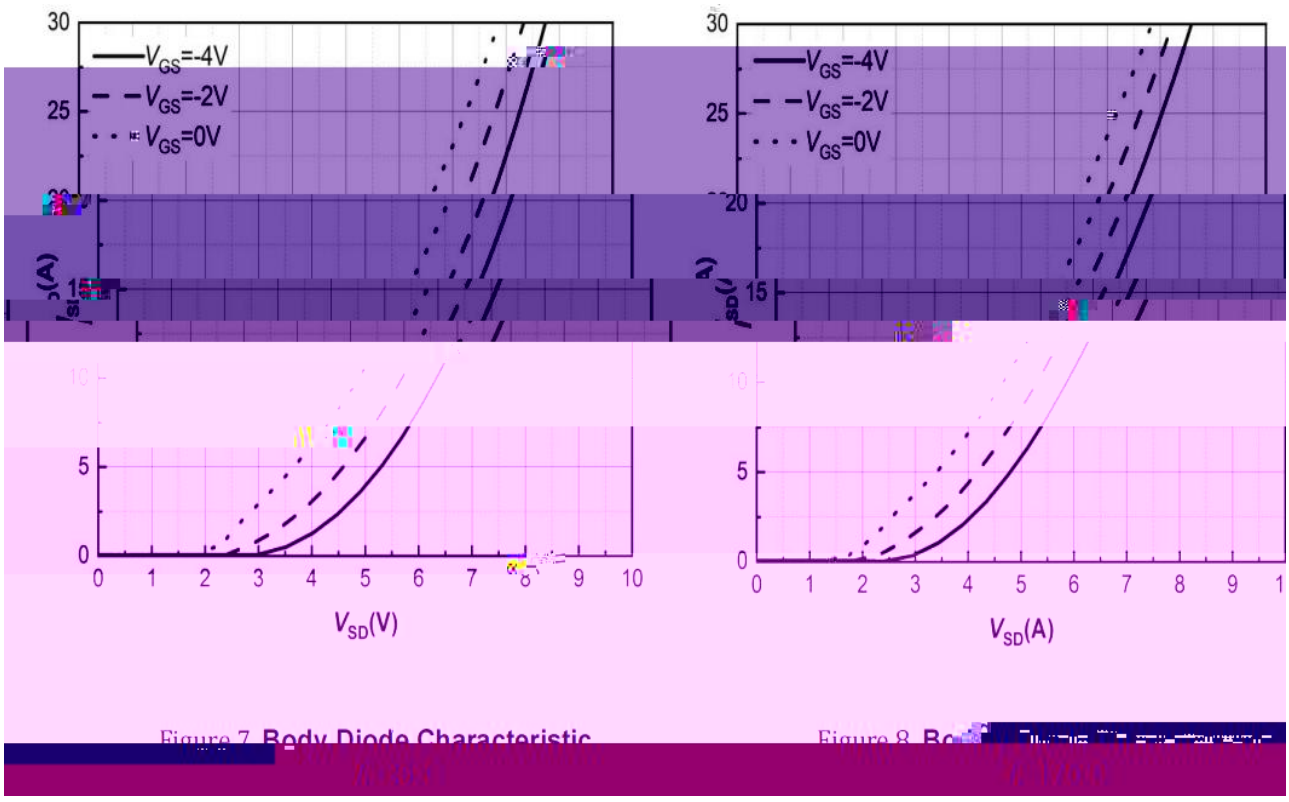
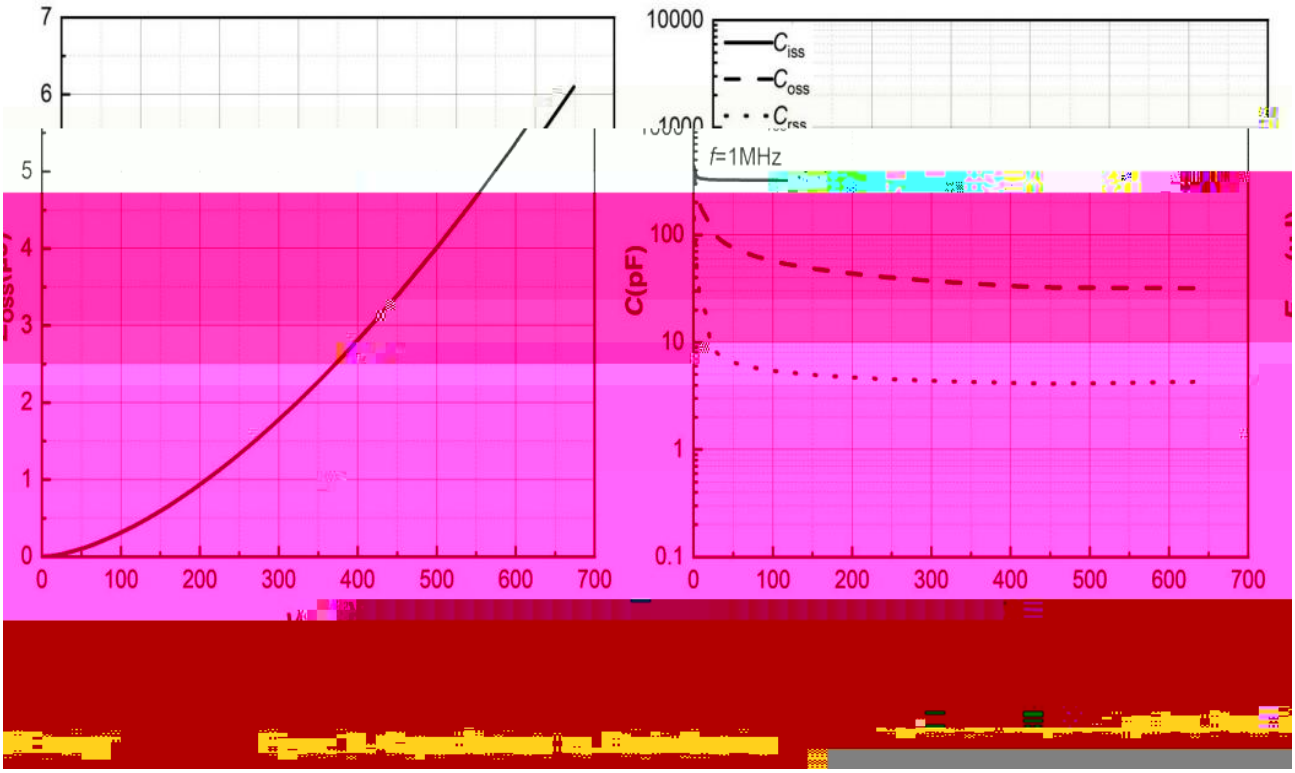


Figure 7 Body Diode Characteristic

Figure 8 Bo

RATINGS AND CHARACTERISTIC CURVES



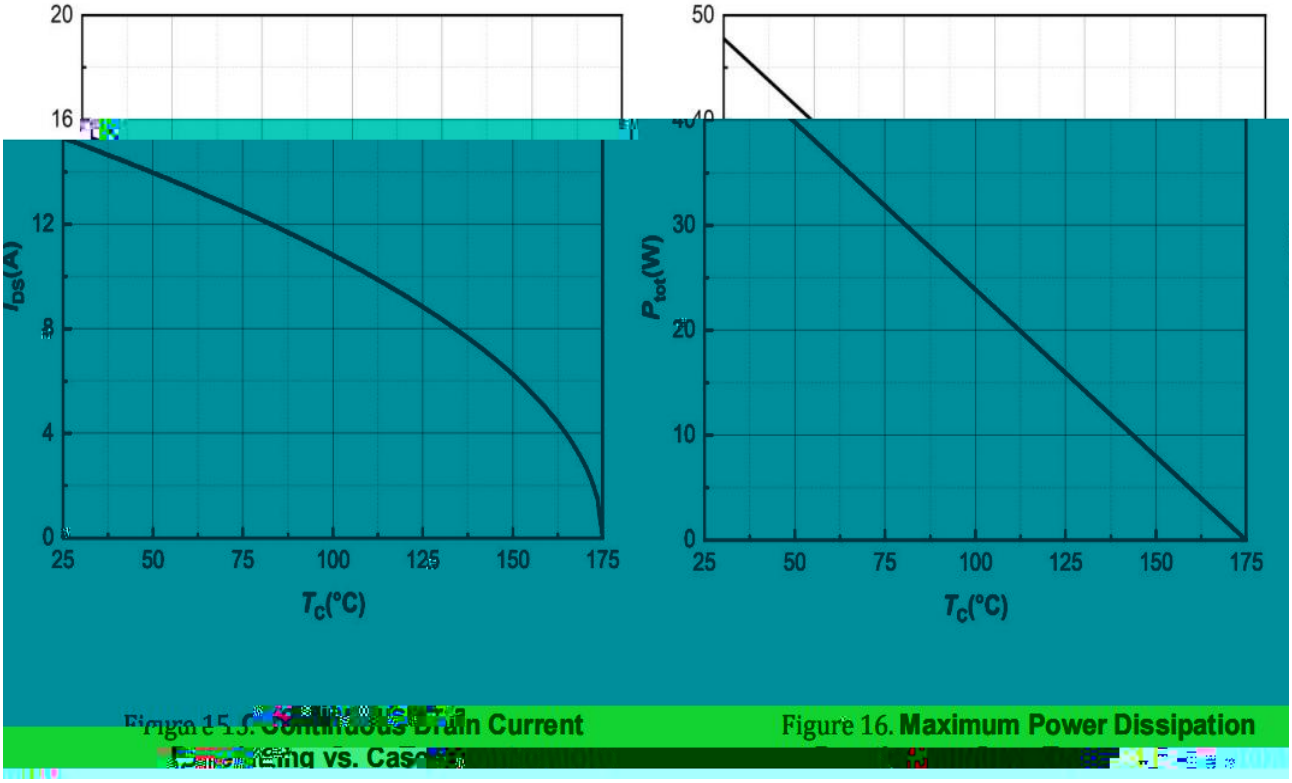


Figure 15. Continuous Drain Current vs. Case Temperature

Figure 16. Maximum Power Dissipation

RATINGS AND CHARACTERISTIC CURVES

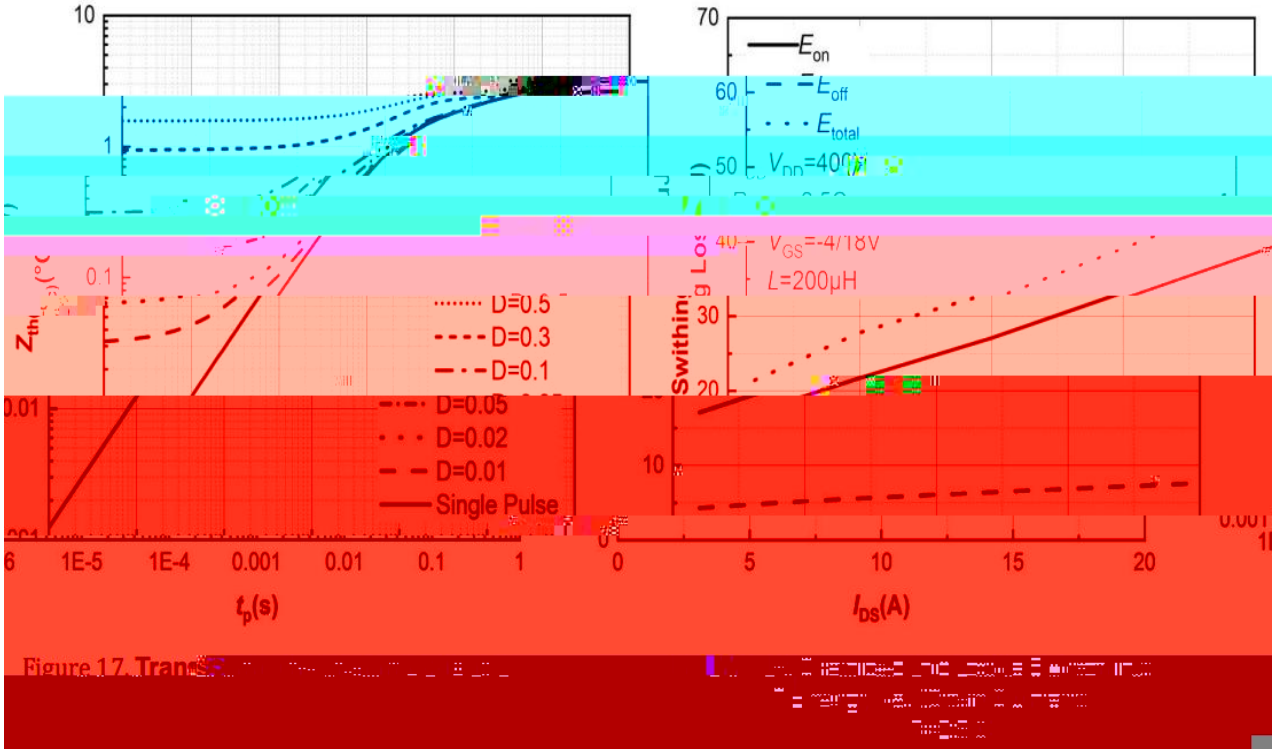


Figure 17. Trans

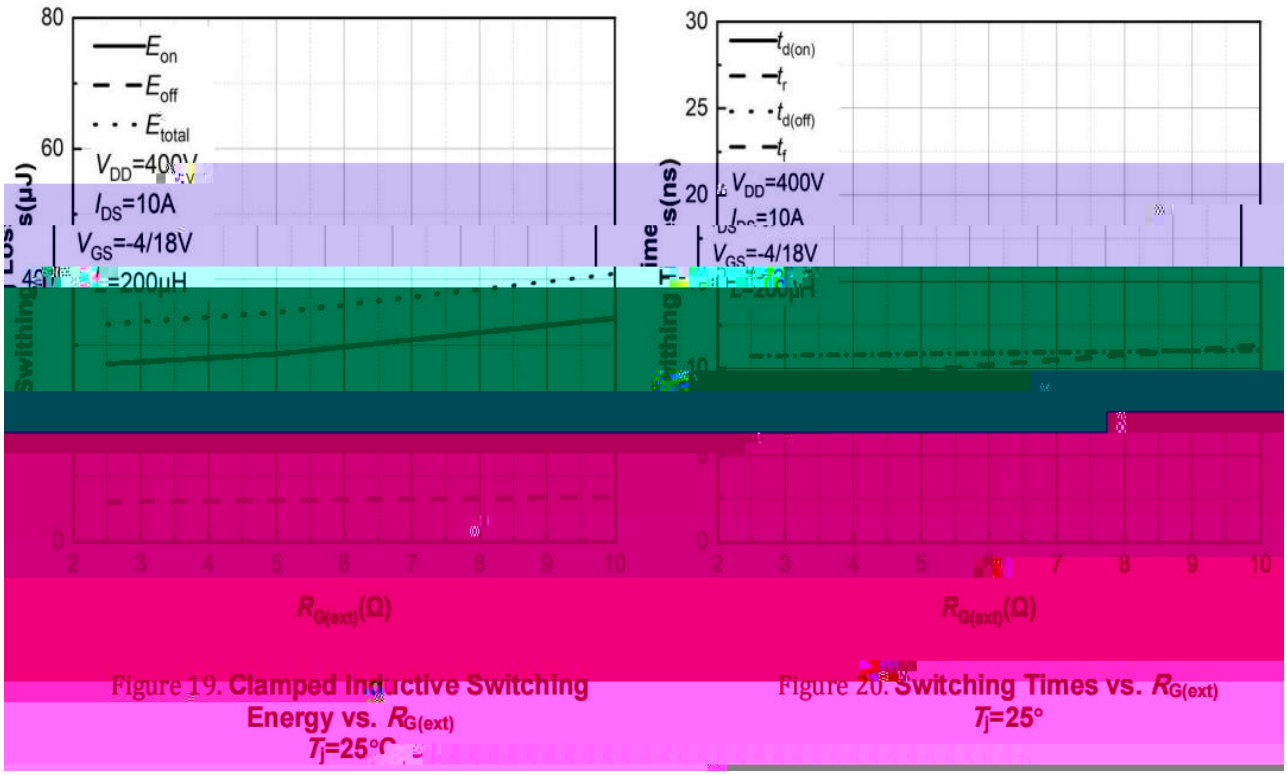
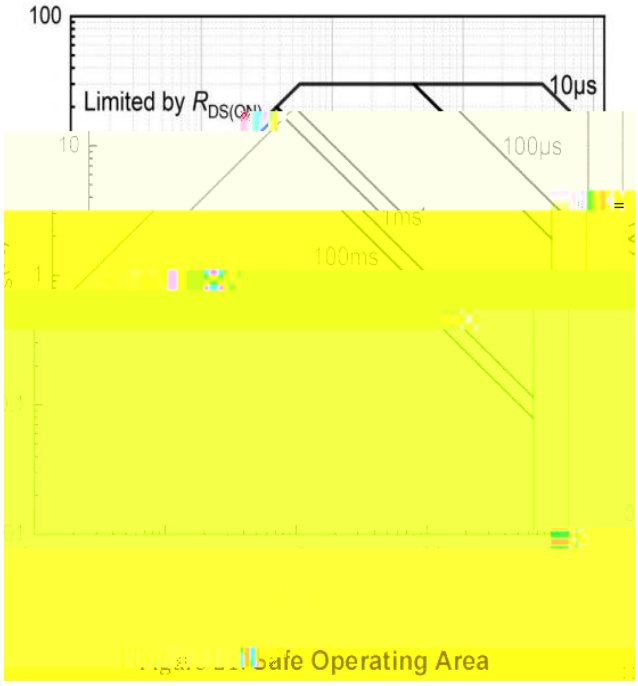
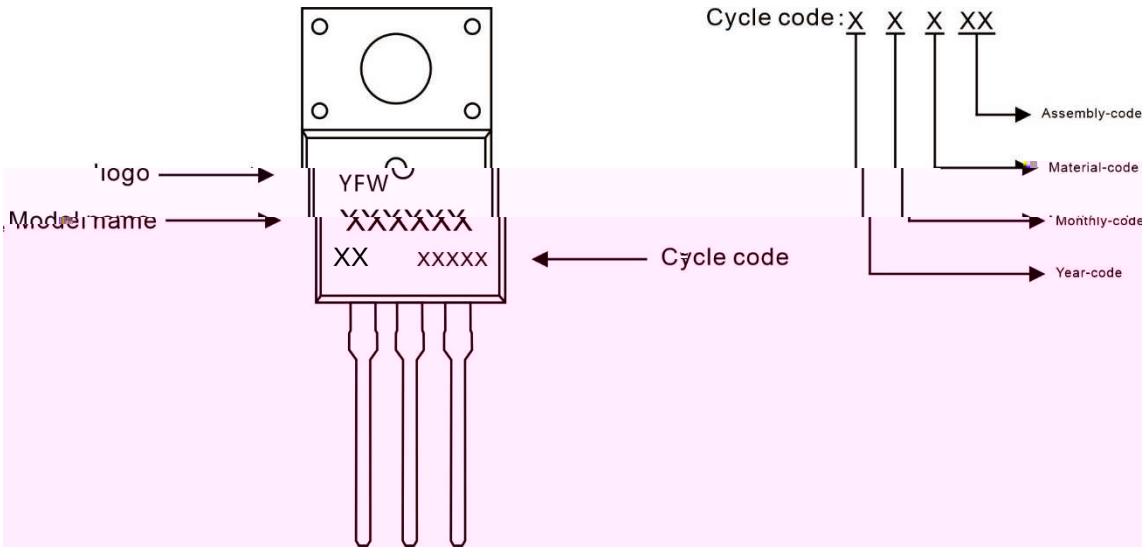


Figure 19. Clamped Inductive Switching Energy vs. $R_{G(ext)}$ T_j=25°C

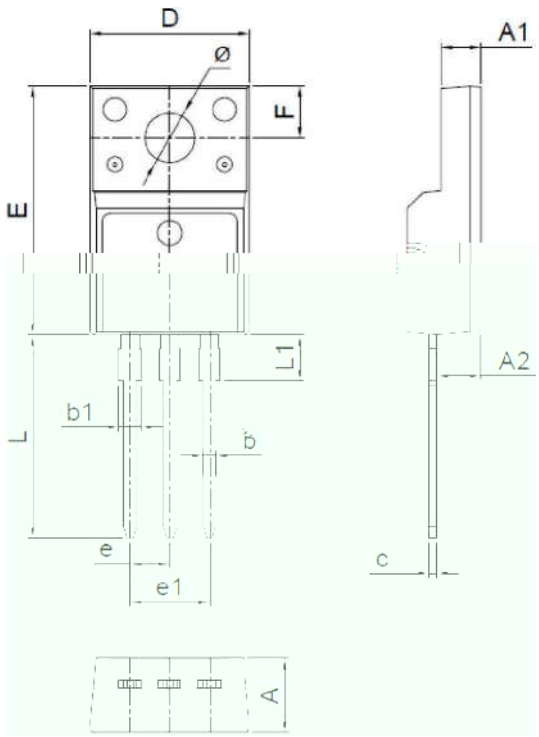
Figure 20. Switching Times vs. $R_{G(ext)}$ T_j=25°

RATINGS AND CHARACTERISTIC CURVES





YFWM318065AFG3	TO-220F	0.06oz(1.74g)	50pcs/tube	1000PCS/Box 5000PCS/Carton



A	4.50	4.90	0.177	0.193
A1	2.34	2.74	0.092	0.108
A2	2.66	2.86	0.105	0.113
b	0.75	0.85	0.030	0.033
b1	1.24	1.44	0.049	0.057
c	0.40	0.60	0.016	0.024
D	10.00	10.32	0.394	0.406
E	15.75	16.05	0.620	0.632
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
F	3.10	3.5	0.122	0.138
L	13.50	13.90	0.531	0.547
L1	2.90	3.30	0.114	0.130
Φ	3.10	3.30	0.122	0.130

YF